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Units

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Publications (79)

Bigdeli A, Falkner F, Schmidt V, Thomas B, Engel H, Reichenberger M, Germann G, Gazyakan E, Kneser U. Free Flap Reconstruction of Sternal Defects after Cardiac Surgery: An Algorithmic Approach for Dealing with Sparse Recipient Vessels. *Plast Reconstr Surg Glob Open* 2024; 12:e5722.

Welling H, Vesterholm K, Toyserkani N, Vedel J, Bigdeli A, Gvozdenovic R, Schmidt V. Local flaps of the hand. *Ugeskr Laeger* 2024; 186

Koeppele C, Pollmann L, Pollmann N, Schulte M, Kneser U, Gretz N, Schmidt V. Microporous Polylactic Acid Scaffolds Enable Fluorescence-Based Perfusion Imaging of Intrinsic In Vivo Vascularization. *Int J Mol Sci* 2023; 24

Dines L, Stellander A, Schmidt V, Rose M. Oncoplastic breast surgery for patients with breast cancer. *Ugeskr Laeger* 2023; 185

Luedde M, Schmidt V, Gänsbacher-Kunzendorf J, Kostev K. Association Between Carpal Tunnel Syndrome and Subsequent Heart Failure Among Adults in Germany. *JAMA Netw Open* 2023; 6:e2323091.

Thomas B, Warszawski J, Falkner F, Bleichert S, Haug V, Bigdeli A, Schulte M, Hoffmann S, Garvalov B, Schreiber C, Takamiya M, Sleeman J, Schmidt V, Kneser U, Pichler B, Dimmler A, Thiele W. Fat Grafts Show Higher Hypoxia, Angiogenesis, Adipocyte Proliferation, and Macrophage Infiltration than Flaps in a Pilot Mouse Study. *Plast Reconstr Surg* 2023; 152:96e-109e.

Mamsen F, Kiilerich C, Hesselfeldt-Nielsen J, Saltvig I, Remvig C, Trøstrup H, Schmidt V. Risk Stratification of Local Flaps and Skin Grafting in Skin Cancer-Related Facial Reconstruction: A Retrospective Single-Center Study of 607 Patients. *J Pers Med* 2022; 12

Thestrup Hansen S, Piil K, Bak Hansen L, Ledertoug K, Hølge-Hazelton B, Schmidt V. Electronic patient-reported outcome measures to enable systematic follow-up in treatment and care of women diagnosed with breast cancer: a feasibility study protocol. *BMJ Open* 2022; 12:e065110.

Schmidt V, Toyserkani N. Prepectoral Breast Reconstruction without Acellular Dermal Matrix: Have We Come Full Circle?. *J Pers Med* 2022; 12

Hemmingsen M, Larsen A, Weltz T, Ørholt M, Wiberg S, Bennedsen A, Bille C, Carstensen L, Jensen L, Bredgaard R, Koudahl V, Schmidt V, Vester-Glowinski P, Hölmich L, Sørensen S, Bjarnsholt T, Damsgaard T, Herly M. Prophylactic treatment of breast implants with a solution of gentamicin, vancomycin and cefazolin antibiotics for women undergoing breast reconstructive surgery: protocol for a randomised, double-blind, placebo-controlled trial (The BREAST-AB trial). *BMJ Open* 2022; 12:e058697.

Eweida A, Flechtenmacher S, Sandberg E, Schulte M, Schmidt V, Kneser U, Harhaus L. Systemically injected bone marrow mononuclear cells specifically home to axially vascularized tissue engineering constructs. *PloS one* 2022; 17:e0272697.

Welling H, Tsigka E, Krogh J, Schmidt V, Munksdorf M. Case report: surgical management of massive scrotal lymphedema in a bariatric patient. *J Surg Case Rep* 2022; 2022:rjac100.

Trøstrup H, Bigdeli A, Krogerus C, Kneser U, Schmidt G, Schmidt V. A Multidisciplinary Approach to Complex Dermal Sarcomas Ensures an Optimal Clinical Outcome. *Cancers (Basel)* 2022; 14

Henn D, Fischer K, Chen K, Greco A, Martin R, Sivaraj D, Trotsyuk A, Mao H, Reddy S, Kneser U, Gurtner G, Schmidt V, Sacks J. Enrichment of Nanofiber Hydrogel Composite with Fractionated Fat Promotes Regenerative Macrophage Polarization and Vascularization for Soft-Tissue Engineering. *Plast Reconstr Surg* 2022; 149:433e-444e.

Jørgensen M, Schmidt V, Sørensen J, Toyserkani N. Invited Response on: Patients Decision-Making Characteristics Affects Gynecomastia Treatment Satisfaction: A Multicenter Study Using the BODY-Q Chest Module. *Aesthetic Plast Surg* 2022; 46:52-53.

Jørgensen M, Cho B, Hansen F, Schmidt V, Sørensen J, Toyserkani N. Patients Decision-Making Characteristics Affects Gynecomastia Treatment Satisfaction: A Multicenter Study Using the BODY-Q Chest Module. *Aesthetic Plast Surg* 2021; 46:1053-1062.

Jørgensen M, Albertsdottir E, Dalaei F, Hesselfeldt-Nielsen J, Schmidt V, Sørensen J, Toyserkani N. Superomedial Reduction Mammoplasty Affects Patients' Ability to Breastfeed in a Distinct Manner: A Multicenter Study of 303 Patients. *Aesthet Surg J* 2021; 41:NP1498-NP1507.

Strübing F, Porubsky S, Bigdeli A, Schmidt V, Krebs L, Kneser U, Sadick M. Interdisciplinary management of peripheral arteriovenous malformations: review of the literature and current proceedings. *J Plast Surg Hand Surg* 2021; 56:1-10.

Lydrup E, Pedersen Pilt A, Schmidt V, Trøstrup H. Subungual Onycholemmal Cysts: A Case Report. *Case Rep Dermatol* 2021; 13:394-398.

Koeppele C, Zhou Z, Huber L, Schulte M, Schmidt K, Gloe T, Kneser U, Schmidt V, de Wit C. Expression of Connexin43 Stimulates Endothelial Angiogenesis Independently of Gap Junctional Communication In Vitro. *Int J Mol Sci* 2021; 22

Thomas B, Haug V, Falkner F, Arras C, Nagel S, Boecker A, Schmidt V, Kneser U, Bigdeli A. A single-center retrospective comparison of Duplex ultrasonography versus audible Doppler regarding anterolateral thigh perforator flap harvest and operative times. *Microsurgery* 2021; 42:40-49.

Thomas B, Warszawski J, Falkner F, Nagel S, Vollbach F, Gazyakan E, Schmidt V, Kneser U, Bigdeli A. A Retrospective Comparative Functional and Aesthetic Outcome Study of Muscle versus Cutaneous Free Flaps for Distal Upper Extremity Reconstruction. *J Reconstr Microsurg* 2021; 38:64-74.

Jørgensen M, Albertsdottir E, Dalaei F, Hesselfeldt-Nielsen J, Schmidt V, Sørensen J, Toyserkani N. Age and Body Mass Index Affect Patient Satisfaction Following Reduction Mammoplasty: A Multicenter Study Using BREAST-Q. *Aesthet Surg J* 2021; 41:NP336-NP345.

Henn D, Abu-Halima M, Kahraman M, Falkner F, Fischer K, Barrera J, Chen K, Gurtner G, Keller A, Kneser U, Meese E, Schmidt V. A multivariable miRNA signature delineates the systemic hemodynamic impact of arteriovenous shunt placement in a pilot study. *Sci Rep* 2020; 10:21809.

Demant M, Saltvig I, Trøstrup H, Schmidt V, Hesselfeldt-Nielsen J. Don't Judge a Tumor by Its Biopsy!. *Case Rep Dermatol* 2020; 12:266-274.

Nagel S, Thomas B, Fischer S, Diehm Y, Ziegler B, Bigdeli A, Schmidt V, Kneser U, Radu C. Random-pattern versus perforator-based adipocutaneous skin paddles for postoperative monitoring of free muscle flaps-a comparative retrospective cohort study. *J Plast Reconstr Aesthet Surg* 2020; 74:747-754.

Nagel S, Radu C, Kremer T, Meess D, Horter J, Ziegler B, Hirche C, Schmidt V, Kneser U, Hundeshagen G. Safety, Pharmacodynamics, and Efficacy of High- Versus Low-Dose Ascorbic Acid in Severely Burned Adults. *J Burn Care Res* 2020; 41:871-877.

Henn D, Chen K, Fischer K, Rauh A, Barrera J, Kim Y, Martin R, Hannig M, Niedoba P, Reddy S, Mao H, Kneser U, Gurtner G, Sacks J, Schmidt V. Tissue Engineering of Axially Vascularized Soft-Tissue Flaps with a Poly-(ϵ -Caprolactone) Nanofiber-Hydrogel Composite. *Adv Wound Care (New Rochelle)* 2020; 9:365-377.

Thomas B, Warszawski J, Falkner F, Nagel S, Schmidt V, Kneser U, Bigdeli A. A comparative study of preoperative color-coded Duplex ultrasonography versus handheld audible Dopplers in ALT flap planning. *Microsurgery* 2020; 40:561-567.

Horch R, Kengelbach-Weigand A, Pierer G, Kneser U, Schaefer D, Boos A, Arkudas A, Schmidt V. [Establishing and evaluating a multinational Science Academy: A new tool for fostering scientific young talents in microsurgical research - a Consensus Statement of the DAM]. *Handchir Mikrochir Plast Chir* 2020; 52:140-146.

Hundeshagen G, Warszawski J, Tapking C, Ziegler B, Hirche C, Kneser U, Schmidt V. Concepts in Early Reconstruction of the Burned Hand. *Ann Plast Surg* 2020; 84:276-282.

Koepfle C, Kallenberger A, Pollmann L, Hundeshagen G, Schmidt V, Kneser U, Hirche C. Comparison of Fasciocutaneous and Muscle-based Free Flaps for Soft Tissue Reconstruction of the Upper Extremity. *Plast Reconstr Surg Glob Open* 2019; 7:e2543.

Schmauss D, Beier J, Eisenhardt S, Horch R, Momeni A, Rabaglio M, Rieck B, Rieger U, Schaefer D, Schmidt V, Kneser U. [The "safe" flap - Preoperative perforator-mapping and intraoperative perfusion assessment to reduce flap-associated morbidity - Consensus statement of the German Speaking Working Group for Microsurgery of the Peripheral Nerves and Vessels]. *Handchir Mikrochir Plast Chir* 2019; 51:410-417.

Schmidt V, Hirsch T, Osinga R, Kotsougiani D, Schaefer D, Pierer G, Kolbensschlag J, Hülsemann W, Kneser U, Lehnhardt M. [The interdisciplinary Microsurgeon - Results of the Consensus Workshop of the German Speaking Society for Microsurgery of Peripheral Nerves and Vessels]. *Handchir Mikrochir Plast Chir* 2019; 51:295-301.

Henn D, Wähmann M, Horsch M, Hetjens S, Kremer T, Gazyakan E, Hirche C, Schmidt V, Germann G, Kneser U. One-Stage versus Two-Stage Arteriovenous Loop Reconstructions: An Experience on 103 Cases from a Single Center. *Plast Reconstr Surg* 2019; 143:912-924.

Schmidt V, Kneser U. [Pedicled Flaps in the Reconstruction of Complex Wounds at the Lower Extremity]. *Z Orthop Unfall* 2019; 157:95-108.

Henn D, Bigdeli A, Horsch M, Weiß C, Kühner C, Hirche C, Schmidt V, Kneser U. Venous bypass grafts versus arteriovenous loops as recipient vessels for microvascular anastomosis in lower extremity reconstructions: A matched-pair analysis. *Microsurgery* 2019; 40:12-18.

Fischer S, Haug V, Diehm Y, Rhodius P, Cordts T, Schmidt V, Kotsougiani D, Horter J, Kneser U, Hirche C. Feasibility and safety of enzymatic debridement for the prevention of operative escharotomy in circumferential deep burns of the distal upper extremity. *Surgery* 2019; 165:1100-1105.

Thomas B, Gazyakan E, Falkner F, Schmidt V, Hirche C, Kneser U, Bigdeli A. Free tissue transfer with the free rectus abdominis flap in high-risk patients above 65 years: A retrospective cohort study. *J Plast Reconstr Aesthet Surg* 2019; 72:555-564.

Henn D, Abu-Halima M, Wermke D, Falkner F, Thomas B, Köppler C, Ludwig N, Schulte M, Brockmann M, Kim Y, Sacks J, Kneser U, Keller A, Meese E, Schmidt V. MicroRNA-regulated pathways of flow-stimulated angiogenesis and vascular remodeling in vivo. *J Transl Med* 2019; 17:22.

Bigdeli A, Thomas B, Schmidt V, Kotsougiani D, Hernekamp F, Hirche C, Kneser U, Gazyakan E. The conjoined parascapular and latissimus dorsi free flap for reconstruction of extensive knee defects. *Microsurgery* 2018; 38:867-875.

Bigdeli A, Gazyakan E, Schmidt V, Bauer C, Germann G, Radu C, Kneser U, Hirche C. Long-Term Outcome after Successful Lower Extremity Free Flap Salvage. *J Reconstr Microsurg* 2018; 35:263-269.

Henn D, Abu-Halima M, Falkner F, Wermke D, Meme L, Kühner C, Keller A, Kneser U, Meese E, Schmidt V. Micro-RNA-Regulated Proangiogenic Signaling in Arteriovenous Loops in Patients with Combined Vascular and Soft-Tissue Reconstructions: Revisiting the Nutrient Flap Concept. *Plast Reconstr Surg* 2018; 142:489e-502e.

Strübing F, Bigdeli A, Schmidt V, Maraka S, Kneser U, Kotsougiani D. Evaluation of perfusion by near-infrared fluorescence imaging in late pedicle obstruction of a parascapular flap to the lower extremity: A case report. *Microsurgery* 2018; 38:912-916.

Boehm D, Bergmeister K, Gazyakan E, Kremer T, Kneser U, Schmidt V. Autologous Breast Reconstruction Using a Tensor Fascia Lata/Anterior Lateral Thigh-Freestyle Flap After Extensive Electric Burn: A Case Report. *Ann Plast Surg* 2018; 80:503-506.

Senghaas A, Kremer T, Schmidt V, Harhaus L, Hirche C, Kneser U, Bigdeli A. Sliding free transverse rectus abdominis myocutaneous flap for closure of a massive abdominal wall defect: A case report. *Microsurgery* 2018; 39:174-177.

Schmidt V, Wietbrock J, Leibig N, Hernekamp J, Henn D, Radu C, Kneser U. Haemodynamically stimulated and in vivo generated axially vascularized soft-tissue free flaps for closure of complex defects: Evaluation in a small animal model. *J Tissue Eng Regen Med* 2017; 12:622-632.

Henn D, Abouarab M, Hirche C, Hernekamp J, Schmidt V, Kneser U, Kremer T. Sequential chimeric medial femoral condyle and anterolateral thigh flow-through flaps for one-stage reconstructions of composite bone and soft tissue defects: Report of three cases. *Microsurgery* 2017; 37:824-830.

Schmidt V, Wietbrock J, Leibig N, Gloe T, Henn D, Hernekamp J, Harhaus L, Kneser U. Collagen-Elastin and Collagen-Glycosaminoglycan Scaffolds Promote Distinct Patterns of Matrix Maturation and Axial Vascularization in Arteriovenous Loop-Based Soft Tissue Flaps. *Ann Plast Surg* 2017; 79:92-100.

Eweida A, Frisch O, Giordano F, Fleckenstein J, Wenz F, Brockmann M, Schulte M, Schmidt V, Kneser U, Harhaus L. Axially vascularized tissue-engineered bone constructs retain their in vivo angiogenic and osteogenic capacity after high-dose irradiation. *J Tissue Eng Regen Med* 2017; 12:e657-e668.

Schmidt V, Covi J, Koeppel C, Hilgert J, Polykandriotis E, Bigdeli A, Distel L, Horch R, Kneser U. Flow Induced Microvascular Network Formation of Therapeutic Relevant Arteriovenous (AV) Loop-Based Constructs in Response to Ionizing Radiation. *Med Sci Monit* 2017; 23:834-842.

Cordts T, Bigdeli A, Harhaus L, Hirche C, Kremer T, Kneser U, Schmidt V. Pyoderma gangrenosum following complex reconstruction of a large-scale lower limb defect by combined Parascapular and latissimus dorsi flap. *J Surg Case Rep* 2017; 2017

Hernekamp J, Neubrech F, Cordts T, Schmidt V, Kneser U, Kremer T. Influences of Macrohemodynamic Conditions on Systemic Microhemodynamic Changes in Burns. *Ann Plast Surg* 2016; 77:523–528.

Leibig N, Wietbrock J, Bigdeli A, Horch R, Kremer T, Kneser U, Schmidt V. Flow-Induced Axial Vascularization: The Arteriovenous Loop in Angiogenesis and Tissue Engineering. *Plast Reconstr Surg* 2016; 138:825–835.

Radu C, Kiefer J, Gebhard M, Bigdeli A, Schmidt V, Germann G, Lehnhardt M, Terness P, Kneser U, Kremer T. Local administration of Mitomycin-C-Treated peripheral blood mononuclear cells (PBMCs) prolongs allograft survival in vascularized composite allotransplantation. *Microsurgery* 2015; 36:417–425.

Neubrech F, Kiefer J, Schmidt V, Bigdeli A, Hernekamp J, Kremer T, Kneser U, Radu C. Domestic bioethanol-fireplaces--a new source of severe burn accidents. *Burns* 2015; 42:209–214.

Bigdeli A, Gazyakan E, Schmidt V, Hernekamp F, Harhaus L, Henzler T, Kremer T, Kneser U, Hirche C. Indocyanine Green Fluorescence for Free-Flap Perfusion Imaging Revisited: Advanced Decision Making by Virtual Perfusion Reality in Visionsense Fusion Imaging Angiography. *Surg Innov* 2015; 23:249–60.

Hernekamp J, Hu S, Schmidt V, Vogelpohl J, Kneser U, Kremer T. Influence of Cdp-Choline Administration on Early Burn Edema in Rats. *Ann Plast Surg* 2015; 75:388–92.

Kneser U, Bigdeli A, Himmler J, Eyüpoglu I, Ganslandt O, Hirsch A, Schmidt V, Beier J, Horch R. Comparison of the Ramirez technique for the closure of large open myelomeningocele defects with alternative methods. *J Plast Reconstr Aesthet Surg* 2015; 68:1675–82.

Weisshaupt C, Covi J, Hilgert J, Leibig N, Arkudas A, Horch R, Kneser U, Schmidt V. Automatic quantification of angiogenesis in 2D sections: a precise and timesaving approach. *J Microsc* 2015; 259:185–96.

Schmidt V, Hilgert J, Covi J, Leibig N, Wietbrock J, Arkudas A, Polykandriotis E, de Wit C, Horch R, Kneser U. Flow increase is decisive to initiate angiogenesis in veins exposed to altered hemodynamics. *PloS one* 2015; 10:e0117407.

Leibig N, Hirche C, Schmidt V, Bigdeli A, Kneser U, Kremer T. Necrotizing fasciitis after central venous catheter placement. *Surg Infect (Larchmt)* 2014; 15:850–2.

Schmidt V, Hilgert J, Covi J, Weiss C, Wietbrock J, de Wit C, Horch R, Kneser U. High flow conditions increase connexin43 expression in a rat arteriovenous and angiointuctive loop model. *PloS one* 2013; 8:e78782.

Kneser U, Beier J, Schmitz M, Arkudas A, Dragu A, Schmidt V, Kremer T, Horch R. Zonal perfusion patterns in pedicled free-style perforator flaps. *J Plast Reconstr Aesthet Surg* 2013; 67:e9–17.

Jobs A, Schmidt K, Schmidt V, Lübke-meier I, van Veen T, Kurtz A, Willecke K, de Wit C. Defective Cx40 maintains Cx37 expression but intact Cx40 is crucial for conducted dilations irrespective of hypertension. *Hypertension* 2012; 60:1422–9.

Andree C, Schmidt V, Munder B, Seidenstücker K, Behrendt P, Witzel C, Horch R, Andrews B, Richrath P. Detecting of breast cancer metastasis by means of regional lymph node sampling during autologous breast reconstruction--a screening of 519 consecutive patients. *Med Sci Monit* 2012; 18:CR605–10.

Polykandriotis E, Schmidt V, Kneser U, Jianming S, Boccaccini A, Horch R. [Bioreactors in regenerative medicine--from a technical device to a reconstructive alternative?]. *Handchir Mikrochir Plast Chir* 2012; 44:198-203.

Schmidt V, Jobs A, von Maltzahn J, Wörsdörfer P, Willecke K, de Wit C. Connexin45 is expressed in vascular smooth muscle but its function remains elusive. *PloS one* 2012; 7:e42287.

Horch R, Kneser U, Polykandriotis E, Schmidt V, Sun J, Arkudas A. Tissue engineering and regenerative medicine - where do we stand?. *J Cell Mol Med* 2012; 16:1157-65.

Schmidt V, Horch R, Dragu A, Weber K, Göhl J, Mehlhorn G, Kneser U. Perineal and vaginal wall reconstruction using a combined inferior gluteal and pudendal artery perforator flap: a case report. *J Plast Reconstr Aesthet Surg* 2012; 65:1734-7.

Schmidt V, Horch R, Dragu A, Beier J, Eyüpoğlu I, Hirsch A, Kneser U. Myocutaneous propeller flap based on the superior gluteal artery (SGA) for closure of large lumbosacral meningocele defects: a case report. *J Plast Reconstr Aesthet Surg* 2011; 65:521-4.

Polykandriotis E, Arkudas A, Beier J, Dragu A, Rath S, Prymachuk G, Schmidt V, Lametschwandtner A, Horch R, Kneser U. The impact of VEGF and bFGF on vascular stereomorphology in the context of angiogenic neo-vascularisation after vascular induction. *J Electron Microsc (Tokyo)* 2011; 60:267-74.

Hoben G, Schmidt V, Bannasch H, Horch R. Tissue augmentation with fibrin sealant and cultured fibroblasts: a preliminary study. *Aesthetic Plast Surg* 2011; 35:1009-15.

Korf-Klingebiel M, Kempf T, Schlüter K, Willenbockel C, Brod T, Heineke J, Schmidt V, Jantzen F, Brandes R, Sugden P, Drexler H, Molkentin J, Wollert K. Conditional transgenic expression of fibroblast growth factor 9 in the adult mouse heart reduces heart failure mortality after myocardial infarction. *Circulation* 2011; 123:504-14.

Brähler S, Kaistha A, Schmidt V, Wölfle S, Busch C, Kaistha B, Kacik M, Hasenau A, Grgic I, Siiskonen H, Bond C, Adelman J, Wulff H, de Wit C, Hoyer J, Köhler R. Genetic deficit of SK3 and IK1 channels disrupts the endothelium-derived hyperpolarizing factor vasodilator pathway and causes hypertension. *Circulation* 2009; 119:2323-32.

Wölfle S, Schmidt V, Hoyer J, Köhler R, de Wit C. Prominent role of KCa3.1 in endothelium-derived hyperpolarizing factor-type dilations and conducted responses in the microcirculation in vivo. *Cardiovasc Res* 2009; 82:476-83.

de Wit C, Boettcher M, Schmidt V. Signaling across myoendothelial gap junctions--fact or fiction?. *Cell Commun Adhes* 2008; 15:231-45.

Schmidt V, Wölfle S, Boettcher M, de Wit C. Gap junctions synchronize vascular tone within the microcirculation. *Pharmacol Rep* 2008; 60:68-74.

Wölfle S, Schmidt V, Hoepfl B, Gebert A, Alcoléa S, Gros D, de Wit C. Connexin45 cannot replace the function of connexin40 in conducting endothelium-dependent dilations along arterioles. *Circ Res* 2007; 101:1292-9.

Projects (0)

No results found.

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